

grossly disproportionate to health benefits that may reasonably be anticipated.

(c) The estimated cost of remedial action to satisfy § 192.12(a) at a "vicinity" site (described under Sec. 101(6)(B) of the Act) is unreasonably high relative to the long-term benefits, and the residual radioactive materials do not pose a clear present or future hazard. The likelihood that buildings will be erected or that people will spend long periods of time at such a vicinity site should be considered in evaluating this hazard. Remedial action will generally not be necessary where residual radioactive materials have been placed semi-permanently in a location where site-specific factors limit their hazard and from which they are costly or difficult to remove, or where only minor quantities of residual radioactive materials are involved. Examples are residual radioactive materials under hard surface public roads and sidewalks, around public sewer lines, or in fence post foundations. Supplemental standards should not be applied at such sites, however, if individuals are likely to be exposed for long periods of time to radiation from such materials at levels above those that would prevail under § 192.12(a).

(d) The cost of a remedial action for cleanup of a building under § 192.12(b) is clearly unreasonably high relative to the benefits. Factors that should be included in this judgment are the anticipated period of occupancy, the incremental radiation level that would be affected by the remedial action, the residual useful lifetime of the building, the potential for future construction at the site, and the applicability of less costly remedial methods than removal of residual radioactive materials.

(e) There is no known remedial action.

(f) Radionuclides other than radium-226 and its decay products are present in sufficient quantity and concentration to constitute a significant radiation hazard from residual radioactive materials.

§ 192.22 Supplemental standards

Federal agencies implementing Subparts A and B may in lieu thereof proceed pursuant to this section with respect to generic or individual situations meeting the eligibility requirements of § 192.21.

(a) When one or more of the criteria of § 192.21(a) through (e) applies, the implementing agencies shall select and perform remedial actions that come as close to meeting the otherwise

applicable standard as is reasonable under the circumstances.

(b) When § 192.21(f) applies, remedial actions shall, in addition to satisfying the standards of Subparts A and B, reduce other residual radioactivity to levels that are as low as is reasonably achievable.

(c) The implementing agencies may make general determinations concerning remedial actions under this Section that will apply to all locations with specified characteristics, or they may make a determination for a specific location. When remedial actions are proposed under this Section for a specific location, the Department of Energy shall inform any private owners and occupants of the affected location and solicit their comments. The Department of Energy shall provide any such comments to the other implementing agencies. The Department of Energy shall also periodically inform the Environmental Protection Agency of both general and individual determinations under the provisions of this section.

§ 192.23 Effective date.

Subparts A, B, and C shall be effective March 7, 1983.

[FR Doc. 82-35395 Filed 12-30-82; 10:59 am]

BILLING CODE 6560-50-M

ENVIRONMENTAL PROTECTION
AGENCY

40 CFR Part 192

[A-FRL 2211-8b]

Standards for Remedial Actions at
Inactive Uranium Processing Sites,
Advance Notice of Proposed
RulemakingAGENCY: Environmental Protection
Agency (EPA).ACTION: Advance Notice of Proposed
Rulemaking.

SUMMARY: EPA has issued final remedial action standards (40 CFR Part 192, Subpart A) for the control of tailings piles at inactive uranium processing sites. This notice announces that the Agency will consider whether different standards than 40 CFR Part 192, Subpart A would be more appropriate for control of tailings piles at those designated sites that have been established as having "medium" or "low" priority for carrying out remedial actions. Specifically, since most of these sites have much lower population densities than the "high" priority sites, 1) should the standards be less restrictive at such sites, and/or 2) should the standards place primary reliance on control of access (such as through fences) rather than physical control of tailings (such as by thick earthen covers) to avoid radiation exposure, so as to reduce the costs of disposal of tailings at these sites?

DATE: Comments are due by May 5, 1983.

ADDRESS: Comments on the issue described in this notice should be submitted to Docket No. A-79-25, which is located at the Environmental Protection Agency, Central Docket Section (A-130), West Tower Lobby, 401 M Street, S.W., Washington, D.C. 20460. Docket A-79-25 contains the rulemaking records. The Docket is available for public inspection between 8:00 a.m. and 4:00 p.m., Monday through Friday. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Dr. Stanley Lichtman, Guides and Criteria Branch (ANR-460), Office of Radiation Programs, U.S. Environmental Protection Agency, Washington, D.C. 20460; telephone 703-557-8927.

SUPPLEMENTARY INFORMATION:

Background

On November 8, 1978, Congress enacted the Uranium Mill Tailings Radiation Control Act of 1978, Pub. L. 95-604 (henceforth designated "the Act"). In the Act, Congress stated its

finding that uranium mill tailings "... may pose a potential and significant radiation health hazard to the public, ... and ... that every reasonable effort should be made to provide for stabilization, disposal, and control in a safe and environmentally sound manner of such tailings in order to prevent or minimize radon diffusion into the environment and to prevent or minimize other environmental hazards from such tailings." The Administrator of the Environmental Protection Agency was directed to set "... standards of general application for the protection of the public health, safety, and the environment ..." to govern this process of stabilization, disposal, and control.

The Act directs the Department of Energy (DOE) to conduct necessary remedial actions at designated inactive uranium processing sites to achieve compliance with the general standards established by EPA. Standards are required for two types of remedial actions: control and cleanup. Control is the operation which places the tailings piles in a condition that will minimize the risk to man for a long time. Cleanup is the operation which reduces the potential health consequences of tailings that have been dispersed from tailings piles by natural forces or removed by man and used elsewhere in buildings or land.

In another part of this issue we have promulgated such standards (40 CFR Part 192). Subparts A and B of the standards cover control and cleanup, respectively; Subpart C addresses implementation of Subparts A and B. This notice concerns only Subpart A, the standards for control of tailings piles.

DOE has designated 24 inactive mill sites for remedial actions under the Act (44 FR 74892, December 18, 1979). Furthermore, as required by Section 102(b) of the Act, DOE has established priorities for carrying out remedial actions at each site (44 FR 74892), relying primarily on advice from EPA. EPA recommended that the primary basis for establishing priorities for carrying out remedial action should be the estimated near-term local rates of induction of health effects associated with radon emissions from the piles. Accordingly, DOE established 9 sites as having "high" priority, 6 as having "medium" priority, and 9 as having "low" priority for carrying out remedial actions. However, in advising DOE on a logical order for carrying out remedial actions, EPA noted that it was not addressing the need for nor the goals of such actions (see docket item IV-E-2).

EPA's goals for control of these tailings piles were described in the supporting documents (see below) for

the final standards as: isolation and stabilization against misuse by people and dispersal by natural forces; reduction of risk to nearby individuals and of the collective risk to populations from radon emitted by the piles; elimination of any significant exposure to gamma radiation from piles; and protection of ground and surface water quality. The longevity of control to achieve these goals was a major concern in setting the standards.

Issues for Public Comment

During the review of the standards by certain Federal agencies required by Section 206(a) of the Act and Executive Order 12291 (46 FR 13193-8, February 19, 1981), questions were raised regarding the appropriateness of the control standards for general application to all 24 inactive sites. Noting that the regions around "low" priority sites are generally sparsely populated, some reviewers suggested that less restrictive standards might be appropriate for sites in the lower priority categories than for those having "high" priority for carrying out remedial actions. In view of this concern at Federal agencies that have reviewed the final standards, EPA is requesting public comments on this issue.

Some of these Federal reviewers suggested, in addition, that a radon limit applied at the boundary ("fenceline") of the government-owned property around a tailings pile would be an appropriate form of standards for the lower priority sites. Such a standard could be satisfied largely by institutional methods, i.e., by acquiring and maintaining control over land. The standard of Subpart A, however, can be satisfied only by generally more costly physical methods (such as applying thick earthen covers) that control the tailings and their emissions, with minimal reliance on institutional methods. EPA also requests comments on the adequacy of such a radon "fenceline" standard to meet the objectives of the Act.

Comments on both issues are requested to assist the Agency in its decision whether the standards should be revised for the lower priority sites. Revision of the standards is authorized by Section 275a of the Atomic Energy Act, as added by Pub. L. 95-604. Persons interested in commenting on these issues may wish to examine the rulemaking record (see "ADDRESS," above), or review site-specific information. Of special interest are the Preamble to the final standards published today, and the Final Environmental Impact Statement (EPA Report 520/4-82-013-1; instructions for obtaining this report are given in the

Preamble). Individual "Engineering Assessment" reports have been prepared for DOE for the 24 designated sites. Ordering instructions may be obtained from the U.S. Department of Energy, Albuquerque Operations Office, Uranium Mill Tailings Remedial Action Project Office, Albuquerque, New Mexico 87108; telephone number 505-844-1014.

List of Subjects in 40 CFR Part 192

Environmental protection, Radiation protection, Uranium.

Dated: December 27, 1982.

John W. Hernandez, Jr.,

Acting Administrator.

[FR Doc. 82-35506 Filed 12-30-82; 11:00 am]

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federal register

**Wednesday
January 5, 1982**

Part III

Department of the Interior

Fish and Wildlife Service

**Endangered and Threatened Wildlife and
Plants; Endangered Status and Critical
Habitats for Two Fish Species in Ash
Meadows, Nevada; Emergency Rule and
Proposed Rule**

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants: Emergency Determination of Endangered Status and Critical Habitats for Two Fish Species in Ash Meadows, Nevada

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Emergency rule.

SUMMARY: The Service determines the Ash Meadows speckled dace and Ash Meadows Amargosa pupfish to be Endangered species and designates their Critical Habitats. This action is being taken because these species are restricted to the Ash Meadows region and groundwater basin in Nye County, Nevada, where they are facing intensifying threats. Imminent land development for housing subdivisions, clearing of land for road construction and agricultural purposes, pumping of groundwater, and diversion of surface flows threaten the integrity of the species' habitat and therefore their survival. This action will result in the continuation of protective measures beyond the January 5, 1982, expiration date of their May 10, 1982, emergency listing as Endangered.

DATES: This emergency determination is effective on January 5, 1983, and expires on September 2, 1983.

ADDRESSES: Interested persons or organizations can obtain information from and submit written comments to the Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 N.E. Multnomah Street, Portland, Oregon 97232.

FOR FURTHER INFORMATION CONTACT: Mr. Sanford R. Wilbur, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 N.E. Multnomah Street, Portland, Oregon 97232 (phone 503/231-6131) or Mr. John L. Spinks, Jr., Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-2771).

SUPPLEMENTARY INFORMATION:**Background**

The Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*) and Ash Meadows speckled dace (*Rhinichthys osculus nevadensis*) are found only in the Ash Meadows basin and require the integrity of its physical environment and maintenance of spring, surface, and subsurface flows for their survival. The Ash Meadows speckled dace was described as a full species

(*Rhinichthys nevadensis*) by Gilbert (1893) based on material collected in 1891 (La Rivers, 1962). It was later designated a subspecies of *Rhinichthys osculus* by Hubbs and Miller (1948). *Cyprinodon nevadensis mionectes* was described by Miller (1948) based on specimens collected in 1937 and 1942.

An emergency rule published on May 10, 1982, listed these fishes as Endangered for a period lasting 240 days. This period of emergency listing expires on January 5, 1983. A proposal of Endangered status and Critical Habitats for these two fish species under normal listing procedures is being published concurrently with this rule. Development of this proposal was delayed as a result of uncertainties concerning changes in listing procedures specified by the 1982 Amendments to the Endangered Species Act. In addition, the Bureau of Land Management (BLM) has been negotiating with Preferred Equities Corporation (PEC), owner of most of these species' remaining habitat, for a land exchange that would have brought these habitats under BLM protection. These negotiations now appear to indicate that a land exchange for all of PEC's land is no longer being considered. The uncertain status of this possible land exchange has delayed development of the economic analysis required for the designation of Critical Habitat. The present emergency listing and Critical Habitat designations for these species will provide protection for these species for the time period from January 5, 1983, the date of expiration of the original emergency listing, until the normal rulemaking process for listings is completed.

The Ash Meadows region is a unique and diverse desert wetland located east of the Amargosa River. These wetlands are maintained by flow from several dozen springs and seeps which are fed by an extensive groundwater system which extends more than 167 km northeast of Ash Meadows. Hundreds of plant and animal species, many of them endemic, are associated with these wetlands and depend upon them for survival.

The Ash Meadows Amargosa pupfish and Ash Meadows speckled dace are restricted to the large warmwater springs and related outflows of Ash Meadows. The pupfish inhabits the pools and outflows of Fairbanks, Rogers, Longstreet, Jack Rabbit, Big, and Point of Rocks Springs; Crystal Pool; three unnamed springs just southeast of Longstreet Spring; and the two westernmost springs of the Bradford Springs group. These springs are at elevations ranging from 655 to 700 m and are generally oriented along an

imaginary line running 16 km from Fairbanks Spring to Big Spring. Water temperatures of the springs are consistently between 24° and 30° C. Flowing water of spring outflows is preferred by the speckled dace. Although formerly inhabiting much of the interconnected surface drainage in Ash Meadows, dace populations have been severely reduced and are now restricted to springs and outflows of Jack Rabbit Spring, Big Spring, and the two westernmost springs of the Bradford Springs group. A number of exotic species, such as mosquitofish and black mollies, have been introduced to these springs and compete with the native fishes.

Many other plant and animal species are endemic to Ash Meadows. The Service proposed the Ash meadows turban snail (*Fluminicola erythropoma*) as Threatened on April 28, 1976 (41 FR 17742). This proposal was withdrawn on December 10, 1979 (44 FR 70796), as a result of the 1978 Amendments to the Endangered Species Act. Current evidence indicates that this species, as proposed, actually comprised more than one species. This area has an extraordinarily diverse freshwater mollusk fauna, which is currently being studied by Dr. Dwight Taylor of Tiburon, California. Of special interest is the presence of two species flocks or complexes of snails which are found within a 5-mile radius in Ash Meadows and gives Ash Meadows the highest concentration of endemic species in the United States. Most of these mollusk species have not been scientifically described and named.

Two endemic Ash Meadows fishes, the Devil's Hole pupfish (*Cyprinodon diabolis*) and the Warm Springs pupfish (*Cyprinodon nevadensis pectoralis*) are already listed as Endangered. The Devil's Hole pupfish's natural distribution is restricted to Devil's Hole, a disjunct portion of Death Valley National Monument. The Warm Springs pupfish occurs only in small nearby springs at an elevation of about 710 m.

The Point of Rocks Springs naucorid (*Ambrysus amargosus*) is an insect that has been recorded living only in Point of Rocks Springs.

A general notice of review on candidate plants in the December 15, 1980, Federal Register (45 FR 82479) included six species that are restricted to Ash Meadows. These species and their edaphic associations are as follows: The spring-loving centaury (*Centaurea namophilum* var. *namophilum*) is restricted to wet clay soils of spring areas and stream banks; the Amargosa niterwort (*Nitrophila*

mohavensis) is found only on undisturbed, salt-encrusted, heavy alkaline mud flats in the Carson Slough area in Inyo County, California; the Ash Meadows gum plant (*Grindelia fraxino-pratensis*) occurs in small populations in relatively undisturbed moist to wet clay soils of spring areas and stream banks, and is often associated with the spring-loving centaur; the Ash Meadows stick-leaf (*Mentzelia leucophylla*) is associated with desert washes in coarse-grained, water-sorted, alkaline soils; the Ash Meadows milk-vetch (*Astragalus phoenix*) occurs in washes and on flats and low knolls in fine-grained, clay-like soils; and corrugated sunray (*Enceliopsis nudicaulis* var. *corrugatum*) occupies strongly alkaline and often poorly drained soils in several localities. An additional species in that review, the tecopa birds-beak (*Cordylanthus tecopensis*), has a wider but still restricted distribution that includes Ash Meadows.

Early homesteaders attempted to farm Ash Meadows using the free-flowing water from the springs for irrigation. These efforts failed because the salty, clay soils were not suitable for crops.

Agricultural practices in the late 1960s and early 1970s resulted in large tracts of land being plowed and the installation of groundwater pumps and diversion ditches to support a cattle-feed operation. These practices resulted in the destruction of many populations of plants and animals and their wetland habitats by alteration of the land surface and lowering of the water table. In 1976, the Supreme Court limited the amount of groundwater pumping in Ash Meadows to ensure sufficient water levels in the only known habitat of the Endangered Devil's Hole pupfish. The agricultural interests in Ash Meadows sold approximately 36 square km of land to a real estate developer, Preferred Equities Corporation (PEC), in 1977.

While the Bureau of Land Management (BLM) is the principal landowner in Ash Meadows, PEC owns most of the surface water rights, which are currently designated for municipal use. Groundwater pumping would be required to develop and support municipal and agricultural activities. The imminent development and concomitant destruction of Ash Meadows by PEC may be avoided if an acceptable alternative can be devised with BLM to protect this fragile habitat. A possibility did exist whereby BLM would have exchanged land suitable for development in the Pahrump Valley (approximately 20 miles SE of Ash Meadows) for PEC's holding in Ash

Meadows. Negotiations between FWS, BLM, and PEC proved fruitless: PEC found BLM lands in the Pahrump Valley unacceptable because of inadequate water supply.

The initial phase of construction, when completed, would result in the destruction of Crystal Pool, Point of Rocks and Jack Rabbit Springs, and possibly lower the level of other springs by groundwater pumping. PEC's activities have already substantially altered surface flows and spring hole morphometry at these sites. The amount of land which would be altered for housing is unknown. PEC has recently constructed a multi-lane road which connects Ash Meadows at Point of Rocks Spring with Pahrump Valley, a connecting section of road (2 miles long and 80 feet wide) north of Jack Rabbit Spring, and a new road (1.5 miles long and 30 feet wide) east of Crystal Pool. In addition, approximately 1,000 acres of cotton have been planted west of Point of Rocks Spring. The terrestrial habitats of the Ash Meadows ecosystems are as fragile as the aquatic habitats. Many candidate plant species are dependent upon the unique hydrological characteristics of this basin and require undisturbed soils for sustenance and propagation.

Factors Affecting the Species

The Service's listing regulations (50 CFR Part 424) provide for a review of the five factors below when listing (or reclassifying or delisting) a species (§ 424.11):

(A) The present or threatened destruction, modification or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) Inadequacy of existing regulatory mechanisms; and

(E) Other natural or manmade factors affecting its continued existence.

These factors, and their application to the subject species, are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.*

The Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace are endemic to the Ash Meadows basin and depend upon the integrity of this fragile ecosystem for their survival. These species require undisturbed flows from the extensive Ash Meadows basin aquifer. The imminent threat to their existence is the proposed development of Ash Meadows by PEC into a residential, recreational, industrial, and agricultural community. Construction activities will clear essential habitat,

directly extirpate populations of these fish, and alter surface drainage patterns. Human habitation will require great quantities of potable water. Utilization of surface outflows from springs and pumping of the aquifer will reduce or eliminate surface flows, lower the water table, and interfere with ground water recharge which will destroy down-gradient wetlands.

Diversion of spring outflows and pumping of spring holes and ground water to provide water for the proposed development will destroy essential habitat of the Ash Meadows speckled dace and Ash Meadows Amargosa pupfish. Since all springs in this aquifer are intricately connected, drawdown at one location would affect water levels of many other springs. In addition, such alternation of surface flows will prevent migration to other suitable habitats and therefore prevent natural expansion of range or recolonization by these species.

To date, the outflow channels of Crystal Pool and King Pool (Point of Rocks Spring) have been modified to increase flows, resulting in the lowering of pool levels 1-1.5 feet and consequently decreasing riparian habitat. A significant area of land has already been altered by road construction in the vicinity of Crystal Pool and Point of Rocks and Jack Rabbit Springs.

Initial construction activities in late spring and summer of 1981 severely altered the watercourse of two springs (Point of Rocks and Bradford) and related spring hole morphometry; these activities severely reduced the populations of the Ash Meadows speckled dace and Ash Meadows Amargosa pupfish in Bradford Springs. Recent excavation of Fairbanks Spring by heavy equipment has apparently eliminated all but one pupfish.

Recent construction activities in Ash Meadows have continued the destruction of fish habitat that began with early agricultural activities. The Ash Meadows Amargosa pupfish has been extirpated in Bole, Deep, and Forest Springs. The Ash Meadows speckled dace has been extirpated from Forest, Fairbanks, Rogers, Longstreet, Tubbs, and Point of Rocks Springs, the easternmost spring of the Bradford Springs group, and Crystal Pool. The ranges of both the pupfish and the dace have been reduced from 1 mile to about 200 yards in the Bradford Springs outflow and from 3 miles to 0.5 mile in the Big Springs outflow. The range of the pupfish has been reduced from 6 miles to 0.5 mile of the Point of Rocks Springs outflow and from 2,000 acres to about 0.5 acre in the area of Fairbanks, Rogers,

and Longstreet Springs. Dace and pupfish populations were temporarily extirpated from Jack Rabbit Spring when the spring pool was pumped dry. Both the dace and pupfish populations are much reduced in most of the limited habitat that they still occupy. Both the pupfish and the dace have been eliminated from Carson Slough where draining, plowing, and mining have eliminated the fish habitat.

PEC's long-term development plans call for direct alteration of many of these springs with construction to progress in three phases in the following areas: Phase I—Crystal Pool; Phase II—Point of Rocks Springs; Phase III—Fairbanks Spring complex. The Nye County Commission has already approved Phases I and II, and work has begun. Further, PEC, as principal owner of water rights, has made application to the State of Nevada to divert water from many of the other Ash Meadows springs, which will destroy more riparian habitat. Ground water pumping may seriously deplete water levels (directly and indirectly) upon which the fish species depend. In the past, pumping of ground water from nearby wells for agriculture has lowered the water level in Devil's Hole in Ash Meadows, which caused a severe decline in the population of the Endangered Devil's Hole pupfish; continued pumping could have caused the extinction of the species. In 1976 the U.S. Supreme Court ruled (*United States vs. Cappaert et al.*) that a minimum water level must be maintained to protect the Devil's Hole pupfish. Devil's Hole is the most sensitive spring in Ash Meadows, but all of the springs are interconnected. The impact of ground water pumping from wells south of Devil's Hole appears to be greater than from those located in the north. Because agricultural and municipal activities require large volumes of water, and pumping of ground water from the northern areas may be necessary to supplement flows from the south, it is expected that the proposed development by PEC will create a demand for water throughout Ash Meadows.

Introduction of exotic fish and other aquatic species which compete with or prey upon native species have caused the extinction of the Ash Meadows killifish (*Empetrichthys merriami*) and reduced or extirpated other native fish populations. Continued modification of habitat by construction activity can only exacerbate this problem.

B. Overutilization for commercial, recreational, scientific, or educational purposes.

Not applicable to these species.

C. Disease or predation.

Numerous exotic organisms have been introduced into springs in Ash Meadows. Some of these exotics, including largemouth bass (*Micropterus salmoides*), crayfish (*Procambarus clarki*), and bullfrogs (*Rana catesbeiana*) prey on the Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace. Largemouth bass have been introduced into Crystal Reservoir and have subsequently gained access to Crystal Pool and its outflow. Crayfish and bullfrogs are common inhabitants in many springs and have significantly contributed to the decline of the Ash Meadows pupfish (La Rivers, 1962; Miller, 1948).

D. The inadequacy of existing regulatory mechanisms.

No permanent regulations exist to protect the two species of fish included in this rule. The existing emergency regulations will expire on January 5, 1983.

E. Other natural or manmade factors affecting its continued existence.

The extremely small range and specialized habitats of these species make them especially vulnerable to all of the factors that adversely affect them.

Vandalism has been reported at a number of springs. Future acts of vandalism could cause the extinction of local populations of the fishes.

The Mexican mollie (*Poecilia mexicana*) and mosquitofish (*Gambusia affinis*) have been introduced into several Ash Meadows spring systems including Point of Rocks, Jack Rabbit, Big, Bradford Springs, and Crystal Pool. These exotic fishes have replaced the pupfish and dace as the dominant species in the affected springs (Deacon et al., 1984). Exotic snails have also become established in several springs, where they compete for food with native fishes.

Critical Habitat

50 CFR Part 424 defines "Critical Habitat" to include areas within the geographical area occupied by the species at the time the species is listed which are essential to the conservation of the species and which may require special management considerations or protection and specific areas outside the geographic area occupied by the species at the time, upon a determination by the Secretary that such areas are essential for the conservation of the species.

Critical Habitat for the Ash Meadows speckled dace is as follows:

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas for a distance of 50 meters from the springs and outflows:

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

Jack Rabbit Spring and its outflows flowing southwest to the boundary between Section 24 in T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Critical Habitat for the Ash Meadows Amargosa pupfish is as follows:

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas or a distance of 50 meters from these springs and outflows:

Fairbanks Spring and its outflow to the boundary between Sections 9 and 10, T. 17 S., R. 50 E.

Rogers Spring and its outflow to the boundary between Sections 15 and 16, T. 17 S., R. 50 E.

Longstreet Spring and its outflow to the boundary between Sections 15 and 22, T. 17 S., R. 50 E.

Three unnamed springs in the northwest corner of Section 23, T. 17 S., R. 50 E. and each of their outflows for a distance of 75 meters from the spring.

Crystal Pool and its outflow for a distance of 400 meters from the pool.

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

Jack Rabbit Spring and its outflow flowing southwest to the boundary between Section 24, in T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Point of Rocks Springs and their entire outflows within Section 7, T. 18 S., R. 51 E.

These Critical Habitats include the springs and associated outflows that are the sole remaining habitat for these fishes. The Critical Habitats also include land areas immediately surrounding these aquatic land areas. These land areas provide vegetative cover that contributes to providing the uniform water conditions preferred by the pupfish and dace and provides habitat for insects and other invertebrates which constitute a substantial portion of their diet.

The activities that may adversely modify these Critical Habitats are described in the "Factors Affecting the Species" section of this emergency rule.

Effect of the Rule

Endangered Species regulations already published in Title 50, § 17.21 of the Code of Federal Regulations, set forth a series of general prohibitions and

exceptions which apply to all Endangered species. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale these species in interstate or foreign commerce. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving Endangered species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes or to enhance the propagation or survival of the species. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

This rule, by extending the protection provided by the original emergency rule, could subject the construction activities of Preferred Equities Corporation (PEC) to enforcement actions, undertaken through Section 9 of the Endangered Species Act, or civil injunction, should such development result in the taking of one of the fish.

This rule requires Federal agencies not only to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace, but also requires them to insure that their actions do not result in the destruction or adverse modification of Critical Habitats. Provisions for Interagency Cooperation are codified at 50 CFR Part 402.

Section 4 (b)(8) of the Act requires that, to the maximum extent practicable, any determination of Critical Habitat be accompanied by a brief description and evaluation of those activities which in the opinion of the Secretary may adversely modify such habitat if undertaken or may be impacted by such designation. Activities that may adversely affect these Critical Habitats include the activities carried out and planned by Preferred Equities Corporation (PEC) that would modify the springs and their outflows, disturb the land areas immediately surrounding these habitats, or draw down the water table to the extent that spring flows are reduced.

Section 4 (b)(2) requires the Service to consider economic and other impacts of

specifying a particular area as Critical Habitat. Listing these species as Endangered does not specifically preclude in their entirety housing, commercial, intensive agricultural, or industrial development in Ash Meadows. Full protection of the two fish species may, however, preclude a portion of the proposed PEC development, and may result in the modification of PEC's construction activities. The Service notes that much of PEC's proposed development may already be precluded by the extent of their water ownership and the Endangered status of the Devil's Hole pupfish and the Warm Springs pupfish. The exact extent of possible water conflict is presently unknown.

The designated Critical Habitats include a total area of approximately 200 acres. Based on the best scientific and commercial data available, smaller Critical Habitats might result in the extinction of species.

The Bureau of Land Management (BLM) has jurisdiction over two springs (Big and Jack Rabbit) that are included in these Critical Habitats. Present BLM activities are consistent with the conservation of these fishes and therefore will not be affected by this action.

National Environmental Policy Act

A draft Environmental Assessment was prepared when these fishes were proposed as Endangered, with Critical Habitat, pursuant to regulations in 50 CFR 424.16 and 50 CFR 424.17. A determination will be made at the time of final listing of these species under normal listing procedures as to whether this is a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969 and 40 CFR Parts 1500-1508.

Primary Author: The primary author of this emergency rule is Steven M. Chambers, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240. Phone: 703/235-1975.

This rule is issued under the following authority:

(Pub. L. 93-205, 87 Stat. 884; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1241; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531, *et seq.*)).

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List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Regulation Promulgation

PART 17—[AMENDED]

1. Accordingly, until September 2, 1983, or until regulations become effective through normal listing procedures, whichever comes first, § 17.11(h), subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended by adding the

following two entries alphabetically to the table under the heading "Fishes" as set forth below.

§ 17.11 Endangered and Threatened Wildlife.

(h) * * *

Common name	Species (scientific name)	Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Fishes							
Dace, Ash Meadows Speckled	<i>Rhinichthys osculus nevadensis</i>	U.S.A. (NV)	Entire	E		17.95(e)	N/A
Pupfish, Ash Meadows Amargosa	<i>Cyprinodon nevadensis mionectes</i>	U.S.A. (NV)	Entire	E		17.95(e)	N/A

§ 17.95 [Amended]

2. It is further determined that § 17.95(e), Fishes, be amended until September 2, 1983 or until these regulations become effective through normal listing procedures, whichever comes first, by adding Critical Habitat of the Ash Meadows speckled dace after that of the spotfin chub as follows:

Ash Meadows Speckled Dace

(*Rhinichthys osculus nevadensis*)

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas for a distance of 50 meters from these springs and outflows:

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

Jack Rabbit Spring and its outflow flowing southwest to the boundary between Section 24 in T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

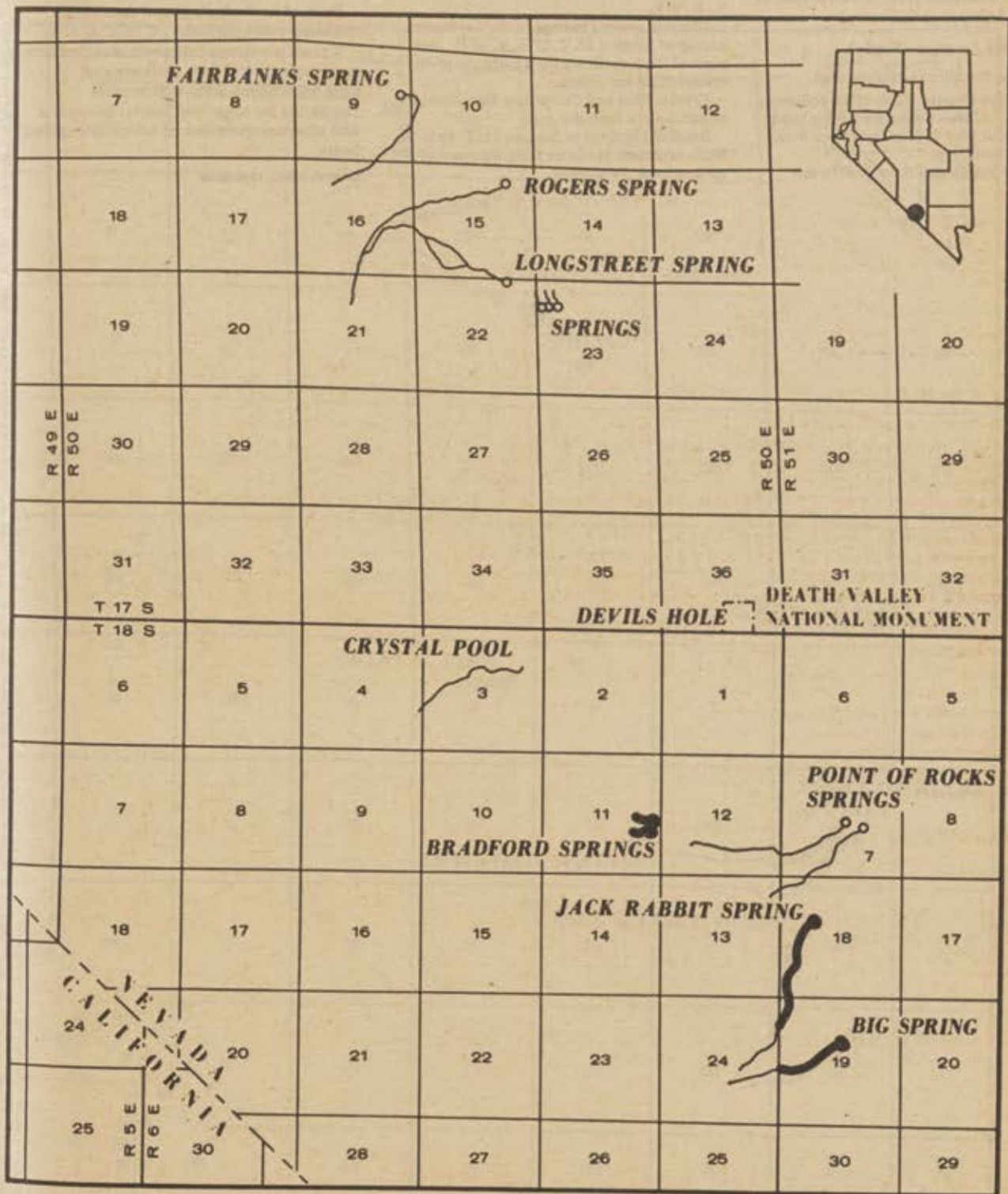
Known constituent elements include warm-water springs and their outflows and surrounding land areas that provide vegetation for cover and habitat for insects and other invertebrates on which the species feeds.

BILLING CODE 4310-55-M

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ASH MEADOWS SPECKLED DACE

Nye County, NEVADA



3. It is further determined that § 17.95 (e), Fishes, be amended until September 2, 1983, or until these regulations are effective through normal listing procedures, whichever comes first, by adding Critical Habitat of the Ash Meadows Amargosa pupfish after that of the leopard darter as follows:

Ash Meadows Amargosa Pupfish

(*Cyprinodon nevadensis minonectes*)

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas for a distance of 50 meters from these springs and outflows:

Fairbanks Spring and its outflow to the

boundary between Sections 9 and 10, T. 17 S., R. 50 E.

Rogers Spring and its outflow to the boundary between Sections 15 and 16, T. 17 S., R. 50 E.

Longstreet Spring and its outflow to the boundary between Sections 15 and 22, T. 17 S., R. 50 E.

Three unnamed springs in the northwest corner of Section 23, T. 17 S., R. 50 E., and each of their outflows for a distance of 75 meters from the spring.

Crystal Pool and its outflow for a distance of 400 meters from the pool.

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

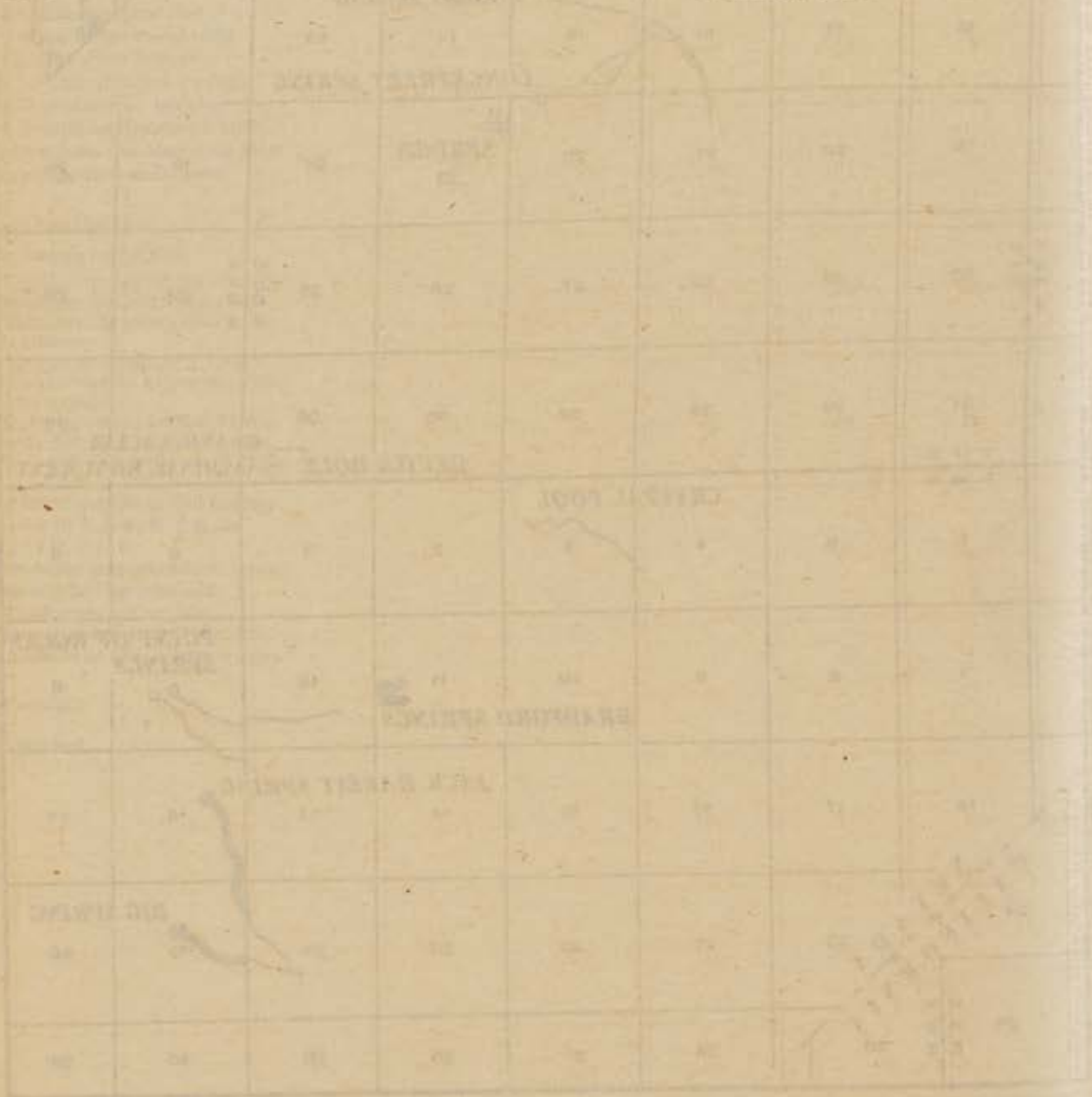
Jack Rabbit Springs and its outflow flowing southwest to the boundary between Section 24, T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Point of Rocks Springs and their entire outflows within Section 7, T. 18 S., R. 51 E.

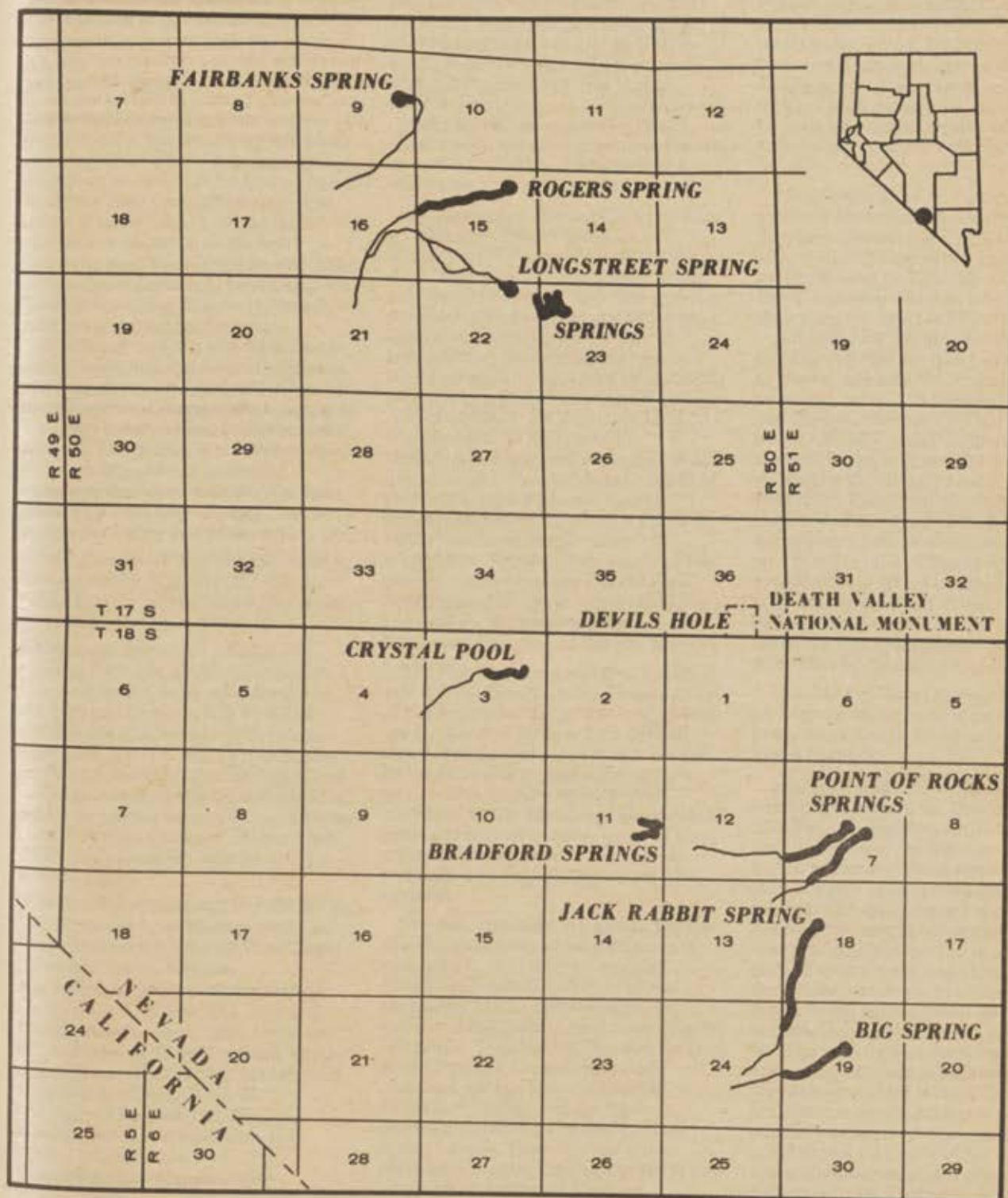
Known constituent elements include warm-water springs and their outflows and surrounding land areas that provide vegetation for cover and habitat for insects and other invertebrates on which this species feeds.

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ASH MEADOWS AMARGOSA PUPFISH

Nye County, NEVADA

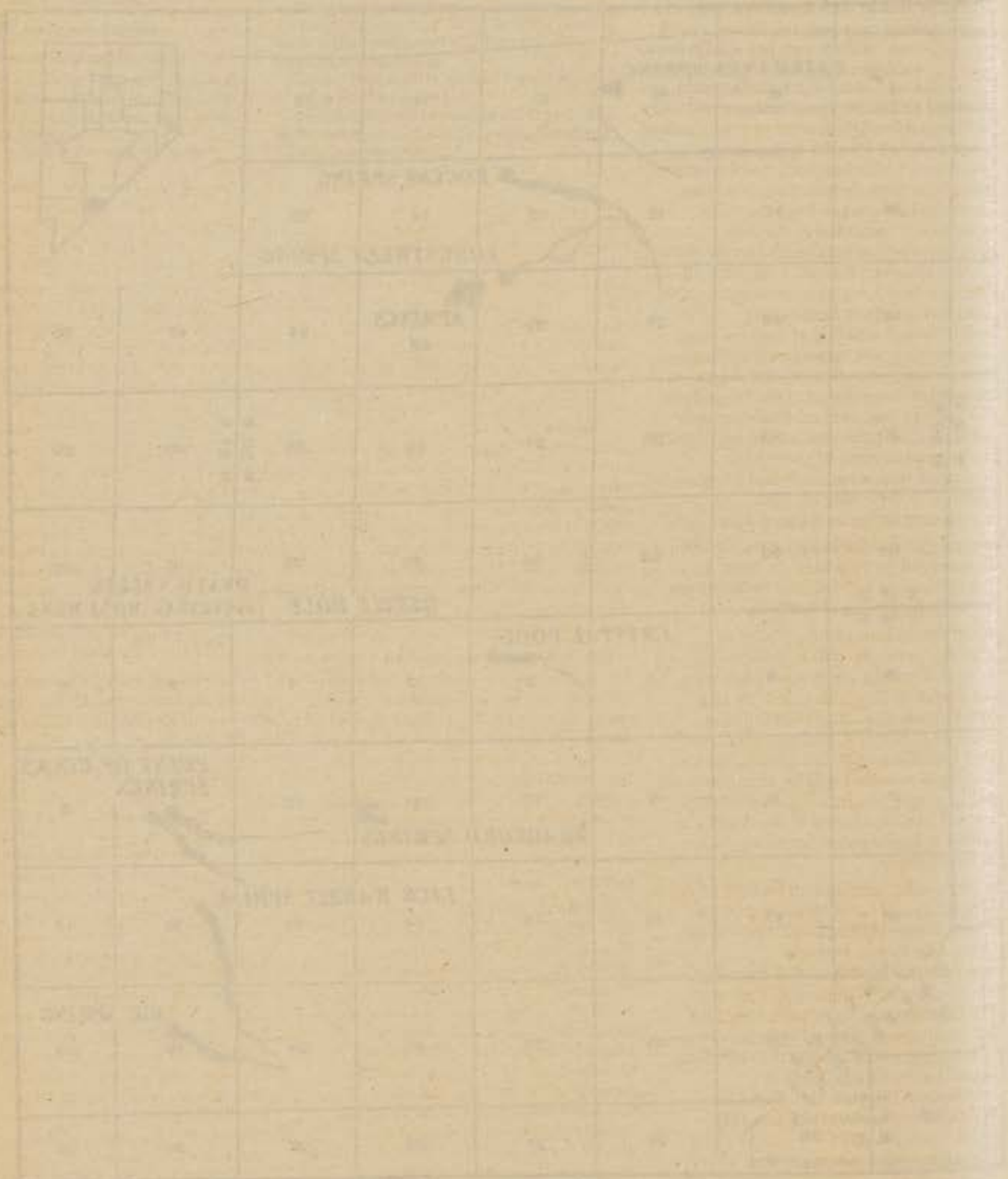


Dated: December 29, 1982.

J. Craig Potter,
*Acting Assistant Secretary for Fish and
Wildlife and Parks.*

[FR Doc. 83-204 Filed 1-4-83; 8:45 am]

BILLING CODE 4310-55-M



DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants: Proposed Endangered Status and Critical Habitats for Two Fish Species in Ash Meadows, Nev.

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine the Ash Meadows speckled dace and Ash Meadows Amargosa pupfish to be Endangered species and to designate their Critical Habitats. This action is being taken because these species are restricted to the Ash Meadows region and groundwater basin in Nye County, Nevada, where they are facing intensifying threats. Imminent land development for housing subdivisions, clearing of land for road construction and agricultural purposes, pumping of groundwater, and diversion of surface flows threaten the integrity of the species' habitat and therefore their survival. The proposed action will result in the continuation of protective measures that were instituted for these species by their May 10, 1982, emergency listing as Endangered.

DATES: Comments from the public must be received by February 22, 1983. A public hearing will be held on February 11, 1983, beginning at 7:00 p.m.

ADDRESSES: Interested persons or organizations can obtain information from and submit written comments to the Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 N.E. Multnomah Street, Portland, Oregon 97232. Comments and materials received will be available for public inspection by appointment during normal business hours at the Service's Office of Endangered Species at the address above.

The public hearing will be held at the U.S. Bureau of Land Management Las Vegas District Office, 4765 West Vegas Drive, Las Vegas, Nevada.

FOR FURTHER INFORMATION CONTACT: Mr. Sanford R. Wilbur, U.S. Fish and Wildlife Service, Suite 1692, Lloyd 500 NE, Multnomah Street, Portland, Oregon 97232 (phone 503/231-6131) or Mr. John L. Spinks, Jr., Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240, (703) 235-2771.

SUPPLEMENTARY INFORMATION:
Background

The Ash Meadows Amargosa pupfish

(*Cyprinodon nevadensis mionectes*) and Ash Meadows speckled dace (*Rhinichthys osculus nevadensis*) are found only in the Ash Meadows basin and require the integrity of its physical environment and maintenance of spring, surface, and subsurface flows for their survival. The Ash Meadows speckled dace was described as a full species (*Rhinichthys nevadensis*) by Gilbert (1893) based on material collected in 1891 (La Rivers, 1962). It was later designed a subspecies of *Rhinichthys osculus* by Hubbs and Miller (1946). (*Cyprinodon nevadensis*) *mionectes* was described by Miller (1948) based on specimens collected in 1937 and 1942.

An emergency rule published on May 10, 1982, listed these fishes as Endangered for a period lasting 240 days. This period of emergency listing expires on January 5, 1983. The present proposal of Endangered status for these species was delayed as a result of uncertainties concerning changes in listing procedures specified by the 1982 amendments to the Endangered Species Act. In addition, the Bureau of Land Management (BLM) has been considering a land exchange that would have brought these habitats under BLM protection. At the present time it appears that a land exchange for all of PEC's land is no longer being considered. The uncertain status of this possible land exchange has delayed development of the economic analysis required for the present proposal of Endangered status and Critical Habitat.

The Ash Meadows region is a unique and diverse desert wetland located east of the Amargosa River. These wetlands are maintained by flow from several dozen springs and seeps which are fed by an extensive groundwater system which extends more than 167 km northeast of Ash Meadows. Hundreds of plant and animal species, many of them endemic, are associated with these wetlands and depend upon them for survival.

The Ash Meadows Amargosa pupfish and Ash Meadows speckled dace are restricted to the large warmwater springs and related outflows of Ash Meadows. The pupfish inhabits the pools and outflows of Fairbanks, Rogers, Longstreet, Jack Rabbit, Big, and Point of Rocks Springs; Crystal Pool; three unnamed springs just southeast of Longstreet Spring; and the two westernmost springs of the Bradford Springs group. These springs are at elevations ranging from 655 to 700 m and are generally oriented along an imaginary line running 16 km from Fairbanks Spring to Big Spring. Water

temperatures of the springs are consistently between 24° and 30° C. Flowing water of spring outflows is preferred by the speckled dace. Although formerly inhabiting much of the interconnected surface drainage in Ash Meadows, dace populations have been severely reduced and are now restricted to springs and outflows of Jack Rabbit Spring, Big Spring, and the two westernmost springs of the Bradford Spring group. A number of exotic species, such as mosquitofish and black mollies, have been introduced to these springs and compete with the native fishes.

Many other plant and animal species are endemic to Ash Meadows. The Service proposed the Ash Meadows turban snail (*Fluminicola erythropoma*) as Threatened on April 28, 1976 (41 FR 17742) this proposal was withdrawn on December 10, 1979 (44 FR 70796) as a result of the 1979 Amendments to the Endangered Species Act. Current evidence indicates that this species, as proposed, actually comprised more than one species. This area has an extraordinarily diverse freshwater mollusk fauna, which is currently being studied by Dr. Dwight Taylor of Tiburon, California. Of special interest is the presence of two species flocks or complexes of snails which are found within a five mile radius in Ash Meadows and give Ash Meadows the highest concentration of endemic species in the United States. Most of these mollusk species have not been scientifically described and named.

The Point of Rocks Springs naucorid (*Ambrysus amargosus*) is an insect that has been recorded living only in Point of Rocks Springs.

A general notice of review on candidate plants in the December 15, 1980 Federal Register (45 FR 82479) included six species that are restricted to Ash Meadows. These species and their edaphic associations are as follows: The spring-loving centaury (*Centaurea namophilum* var. *namophilum*) is restricted to wet clay soils of spring areas and stream banks; the Amargosa niterwort (*Nitrophila mohavensis*) is only found on undisturbed, salt-encrusted, heavy alkaline mud flats in the Carson Slough area in Inyo County, California; the Ash Meadow gum plant (*Grindelia faraxino-pratensis*) occurs in small populations in relatively undisturbed moist to wet clay soils of spring areas and stream banks, and is often associated with the spring-loving centaury; the Ash Meadows stick-leaf (*Mentzelia leucophylla*) is associated

with desert washes in coarse-grained, water-sorted, alkaline soils; the Ash Meadows milk-vetch (*Astragalus phoenix*) occurs in washes and on flats and low knolls in fine-grained, clay-like soils; and corrugated sunray (*Enceliopsis nudicaulis* var. *corrugatum*) occupies strongly alkaline and often poorly drained soils in several localities. An additional species in that review, the tecopa birds-beak (*Cordylanthus tecopensis*), has a wider distribution that includes Ash Meadows.

Early homesteaders attempted to farm Ash Meadows using the free-flowing water from the springs for irrigation. These efforts failed because the salty, clay soils were not suitable for crops.

Agricultural practices in the late 1960s and early 1970s resulted in large tracts of land being plowed and the installation of groundwater pumps and diversion ditches to support a cattle-feed operation. These practices resulted in the destruction of many populations of plants and animals and their wetland habitats by alteration of the land surface and lowering of the water table. In 1976, the Supreme Court limited the amount of groundwater pumping in Ash Meadows to ensure sufficient water levels in the only known habitat of the Endangered Devil's Hole pupfish. The agricultural interests in Ash Meadows sold approximately 36 square km of land to a real estate developer, PEC, in 1977.

While the BLM is the principal landowner in Ash Meadows, PEC owns most of the surface water rights, which are currently designated for municipal use. Groundwater pumping would be required to develop and support municipal and agricultural activities. The imminent development and concomitant destruction of Ash Meadows by PEC may be avoided if an acceptable alternative can be devised with BLM to protect this fragile habitat. A possibility did exist whereby BLM would have exchanged land suitable for development in the Pahrump Valley (approximately 20 miles SE of Ash Meadows) for PEC's holding in Ash Meadows. Negotiations between FWS, BLM, and PEC proved fruitless; PEC found BLM lands in the Pahrump Valley unacceptable because of inadequate water supply.

The initial phase of construction, when completed would result in the destruction of Crystal Pool, Point of Rocks Spring and Jack Rabbit Springs and possibly lower the level of other springs by groundwater pumping. PEC's activities have already substantially altered surface flows and spring hole morphometry at these sites. The amount of land which would be altered for housing is unknown. PEC has recently

constructed a multi-lane road which connects Ash Meadows at Point of Rocks Spring with Pahrump Valley, a connecting section of road (2 miles long and 80 feet wide) north of Jack Rabbit Springs, and a new road (1.5 miles long and 30 feet wide) east of Crystal Pool. In addition, approximately 1,000 acres of cotton have been planted west of Point of Rocks Spring. The terrestrial habitats of the Ash Meadows ecosystem are as fragile as the aquatic habitats. Many candidate plant species are dependent upon the unique hydrological characteristics of this basin and require undisturbed soils for sustenance and propagation.

Factors Affecting the Species:

The Service's listing regulations (50 CFR Part 424) provide for a review of the five factors below when listing (or reclassifying or delisting) a species (§ 424.11):

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Utilization for commercial, recreational, scientific, or educational purposes at levels that detrimentally affect it;

(C) Disease or predation;

(D) Absence of regulatory mechanisms adequate to prevent the decline of a species or degradation of its habitat; and

(E) Other natural or manmade factors affecting its continued existence.

These factors, and their application to the subject species, are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range. The Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace are endemic to the Ash Meadows basin and depend upon the integrity of this fragile ecosystem for their survival. These species require undisturbed flows from the extensive Ash Meadows basin aquifer. The imminent threat to their existence is the proposed development of Ash Meadows by PEC into a residential, recreational, industrial, and agricultural community. Construction activities will clear essential habitat, directly extirpate populations of these fishes, and alter surface drainage patterns. Human habitation will require great quantities of potable water. Utilization of surface outflows from springs and pumping of the aquifer will reduce or eliminate surface flows, lower the groundwater table, and interfere with groundwater recharge which will destroy down-gradient wetlands.

Diversion of spring outflows and pumping of spring holes and groundwater to provide water for the

proposed development will destroy essential habitat of the Ash Meadows speckled dace and Ash Meadows Amargosa pupfish. Since all springs in this aquifer are intricately connected, drawdown at one location would affect water levels of many other springs. In addition, such alteration of surface flows will prevent migration to other suitable habitats and therefore prevent natural expansion of range or recolonization by these species.

To date, the outflow channels of Crystal Pool and King Pool (Point of Rocks Spring) have been modified to increase flows, resulting in the lowering of pool levels 1-1.5 feet and consequently decreasing riparian habitat. A significant area of land has already been altered by road construction in the vicinity of Crystal Pool and Point of Rocks and Jack Rabbit Springs.

Initial construction activities in late spring and summer of 1981 severely altered the watercourse of two springs (Point of Rocks and Bradford) and related spring hole morphometry; these activities severely reduced the populations of the Ash Meadows speckled dace and Ash Meadows Amargosa pupfish in Bradford Springs. Recent excavation of Fairbanks Spring by heavy equipment has apparently eliminated all but one pupfish.

Recent construction activities in Ash Meadows have continued the destruction of fish habitat that began with early agricultural activities. The Ash Meadows Amargosa pupfish has been extirpated in Bole, Deep, and Forest Springs. The Ash Meadows speckled dace has been extirpated from Forest, Fairbanks, Rogers, Longstreet, Tubbs, and Point of Rocks Springs, the easternmost spring of the Bradford Springs group, and Crystal Pool. The ranges of both the pupfish and the dace have been reduced from 1 mile to about 200 yards in the Bradford Springs outflow and from 3 miles to .5 mile in the Big Springs outflow. The range of the pupfish has been reduced from 6 miles to .5 mile of the Point of Rocks Springs outflow and from 2,000 acres to about 0.5 acre in the area of Fairbanks, Rogers and Longstreet Springs. Dace and pupfish populations were temporarily extirpated from Jack Rabbit Spring when the spring pool was pumped dry. Both the dace and pupfish populations are much reduced in most of the limited habitat that they still occupy. Both the pupfish and the dace have been eliminated from Carson Slough where draining, plowing, and mining have eliminated the fish habitat.

PEC's long-term development plans call for direct alteration of many of these springs with construction to progress in 3 phases in the following areas: Phase I—Crystal Pool; Phase II—Point of Rocks Spring; Phase III—Fairbanks Spring complex. The Nye County Commission has already approved Phases I and II, and work has begun. Further, PEC, as principal owner of water rights, has made application to the State of Nevada to divert water from many of the other Ash Meadows springs, which will destroy more riparian habitat. Groundwater pumping may seriously deplete water levels (directly and indirectly) upon which the fish species depend. In the past, pumping of groundwater from near by wells for agriculture has lowered the water level in Devil's Hole in Ash Meadows, which caused a severe decline in the population of the Endangered Devil's Hole pupfish; continued pumping could have caused the extinction of the species. In 1976 the U.S. Supreme Court ruled (*United States v. Cappaert et al.*) that a minimum water level must be maintained to protect the Devil's Hole pupfish. Devil's Hole is the most sensitive spring in Ash Meadows and the springs are interconnected. The impact of groundwater pumping from wells south of Devil's Hole appears to be greater than from those located in the north. Because agricultural and municipal activities require large volumes of water, and pumping of groundwater from the northern areas may be necessary to supplement flows from the south, it is expected that the proposed development by PEC will create a demand for water throughout Ash Meadows.

Introduction of exotic fish and other aquatic species which compete with or prey upon native species have caused the extinction of the Ash Meadows killifish (*Empetrichthys merriami*) and reduced or extirpated other native fish population. Continued modification of habitat by construction activity can only exacerbate this problem.

B. Overutilization for commercial, recreational, scientific or educational purposes. Although taking endangered wildlife is prohibited, these activities could affect the tenuous existence of these fishes. If these species are not accorded Endangered status under the regular listing process, protection would cease leading to potential threat from taking.

C. Disease or predation. Numerous exotic organisms have been introduced into springs in Ash Meadows. Some of these exotics including largemouth bass (*Micropterus salmoides*), crayfish

(*Procambarus clarki*), and bullfrogs (*Rana catesbeiana*), prey on the Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace. Large mouth bass have been introduced into Crystal Reservoir and have subsequently gained access to Crystal Pool and its outflow. Crayfish and bullfrogs are common inhabitants in many springs and have significantly contributed to the decline of the Ash Meadows pupfish (La Rivers, 1962, Miller, 1948).

D. The inadequacy or existing regulatory mechanisms. No permanent regulations exist to protect the two species of fish included in this rule. The existing emergency regulations will expire on January 5, 1983.

E. Other natural or man-made factors affecting its continued existence. The extremely small range and specialized habitats of these species make them especially vulnerable to all of the factors that adversely affect them.

Vandalism has been reported at a number of springs. Future acts of vandalism could cause the extinction of local populations of the fishes.

The Mexican mollie (*Poecilia mexicana*) and mosquitofish (*Gambusia affinis*) have been introduced into several Ash Meadows spring systems including Point of Rocks, Jack Rabbit, Big, and Bradford Spring and Crystal Pool. These (Deacon *et al.*, 1964) have replaced the pupfish and dace as the dominant species in the affected springs. Exotic snails have also become established in several springs where they compete with native fishes for food.

Critical Habitat

50 CFR part 424 defines "Critical Habitat" to include areas within the geographical area occupied by the species at the time the species is listed which are essential to the conservation of the species and which may require special management considerations or protection and specific areas outside the geographic area occupied by the species at the time, upon a determination by the Secretary that such areas are essential for the conservation of the species.

Proposed Critical Habitat for the Ash Meadows speckled dace is as follows:

Nevada, Nye County: Each of the following spring and outflows plus surrounding land areas for a distance of 50 meters from the springs and outflows: Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

Jack Rabbit Spring and its outflows flowing southwest to the boundary between Section 24 in T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Springs and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Proposed Critical Habitat for the Ash Meadows Amargosa pupfish is as follows:

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas for a distance of 50 meters from these springs and outflows:

Fairbanks Spring and its outflow to the boundary between Sections 9 and 10, T. 17 S., R. 50 E.

Rogers Spring and its outflow to the boundary between Sections 15 and 16, T. 17 S., R. 50 E.

Longstreet Spring and its outflow to the boundary between Sections 15 and 22, T. 17 S., R. 50 E.

Three unnamed springs in the northwest corner of Section 23, T. 17 S., R. 50 E. and each of their outflows for a distance of 75 meters from the spring.

Crystal Pool and its outflow for a distance of 400 meters from the pool.

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

Jack Rabbit Spring and its outflow southwest to the boundary between Section 24, in T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Point of Rocks Springs and their entire outflows within Section 7, T. 18 S., R. 51 E.

These Critical Habitats include the springs and associated outflows that are the sole remaining habitat for these fishes. The Critical Habitats also include land areas immediately surrounding these aquatic land areas. These land areas provide vegetative cover that contributes to providing the uniform water conditions preferred by the pupfish and dace and provides habitat for insects and other invertebrates which constitute a substantial portion of their diet.

The activities that may adversely modify these Critical Habitats are described in the "Factors Affecting the Species" section of this proposed rule.

Effect of This Proposal if Published as a Final Rule

Endangered Species regulations already published in Title 50, § 17.21 of the Code of Federal Regulations, set forth a series of general prohibitions and exceptions which apply to all Endangered species. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to take, import or export,

ship in interstate commerce in the course of a commercial activity, or sell or offer for sale these species in interstate or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving Endangered species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes or to enhance the propagation or survival of the species. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

This rule, by extending the protection provided by the emergency rule, would allow the threat of development by PEC to be met by enforcement action undertaken through Section 9 of the Endangered Species Act or civil injunction should such development jeopardize the existence of the fish. Alteration of the water levels in habitats supporting these species would likewise be countered by enforcement efforts.

If published as a final rule this proposal would require Federal agencies not only to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace, but also requires them to insure that their actions do not result in the destruction or adverse modification of Critical Habitats. Provisions for Interagency Cooperation are codified at 50 CFR Part 402.

Subsection 4(b)(8) of the Act requires that, to the maximum extent practicable, any proposal to determine Critical Habitat be accompanied by a brief description and evaluation of those activities which in the opinion of the Secretary many adversely modify such habitat if undertaken or may be impacted by such designation. Activities that may adversely affect these Critical Habitats include the activities carried out and planned by PEC that would modify the springs and their outflows, disturb the land areas immediately surrounding these habitats, or draw down the water table to the extent that spring flows are reduced.

Subsection 4(b)(4) requires the Service to consider economic and other impacts of specifying a particular area as Critical Habitat. Listing these species as

Endangered does not specifically preclude in their entirety housing, commercial, intensive agricultural, or industrial development in Ash Meadows. Full protection of the two fish species may preclude a portion of the proposed PEC development; however, much of their proposed development is already precluded by the extent of their water ownership. The exact extent of possible water conflict is presently unknown.

At the time of formulation of the Determination of Effects, a Critical Habitat of 2,960 acres was expected. The presently proposed Critical Habitat is approximately 200 acres. It is believed, based on the best scientific and commercial data available, further reduction might result in the extinction of the species.

The Bureau of Land Management (BLM) has jurisdiction over two springs (Big and Jack Rabbit) that are included in these Critical Habitats. Present BLM activities are consistent with the conservation of these fish and therefore will not be affected by this proposed action.

The Service is notifying Federal agencies that may have jurisdiction over the land and water under consideration in this proposed action. These Federal agencies and other interested persons or organizations are requested to submit information on economic or other impacts of this proposed action.

Public Comments Solicited

The service intends that the rules finally adopted will be as accurate and effective as possible in the conservation of any Endangered or Threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial, or other relevant data concerning any threat (or the lack thereof) to the species included in this proposal;

(2) The location of and the reasons why any habitat of these species should or should not be determined to be Critical Habitat as provided for by Section 7 of the Act.

(3) Additional information concerning the range and distribution of these species.

(4) Current or planned activities which may adversely modify the subject areas which are being considered for Critical Habitat; and

(5) The foreseeable economic and other impacts of the Critical Habitat

designations on federally funded or authorized projects.

A public hearing on this action will be held on February 11, 1983 beginning at 7:00 p.m. at the U.S. Bureau of Land Management Las Vegas District Office, 4785 West Vegas Drive, Las Vegas, Nevada.

National Environmental Policy Act

A draft environmental assessment has been prepared in conjunction with this proposal. It is on file in the Service's Office of Endangered Species, 1000 North Glebe Road, Arlington, Virginia, and may be examined by appointment during regular business hours. A determination will be made at the time of a final rulemaking as to whether this is a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (40 CFR Parts 1500-1508).

Primary Author: The primary author of these proposed rules is Steven M. Chambers, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240. Phone: 703/235-1975.

Authority: This proposal is being published under the authority contained in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*; 96 Stat. 1411).

References

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List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Regulations Promulgation

Accordingly, It is proposed to amend

§ 17.11(h), Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, by adding the following two entries alphabetically to the table (h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Fishes:							
Dace, Ash Meadows speckled.	<i>Rhinichthys osculus nevadensis</i>	U.S.A. (NV)	Entire	E		17.95(e)	NA
Pupfish, Ash Meadows Amargosa.	<i>Cyprinodon nevadensis mionectes</i>	U.S.A. (NV)	Entire	E		17.95(e)	NA

§ 17.95 [Amended]

2. It is further proposed that § 17.95(e), Fishes, be amended by adding Critical Habitat of the Ash Meadows speckled dace after that of the spotfin club as follows:

Ash Meadows Speckled Dace

(*Rhinichthys osculus nevadensis*)

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas for a distance of 50 meters from these springs and outflows:

under the heading "Fishes" as set forth below.

§ 17.11 Endangered and threatened Wildlife

* * *

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

Jack Rabbit Spring and its outflow flowing southwest to the boundary between Section 24 in T. 18 S., R. 50 E. and Section 19, 18 S., R. 51 E.

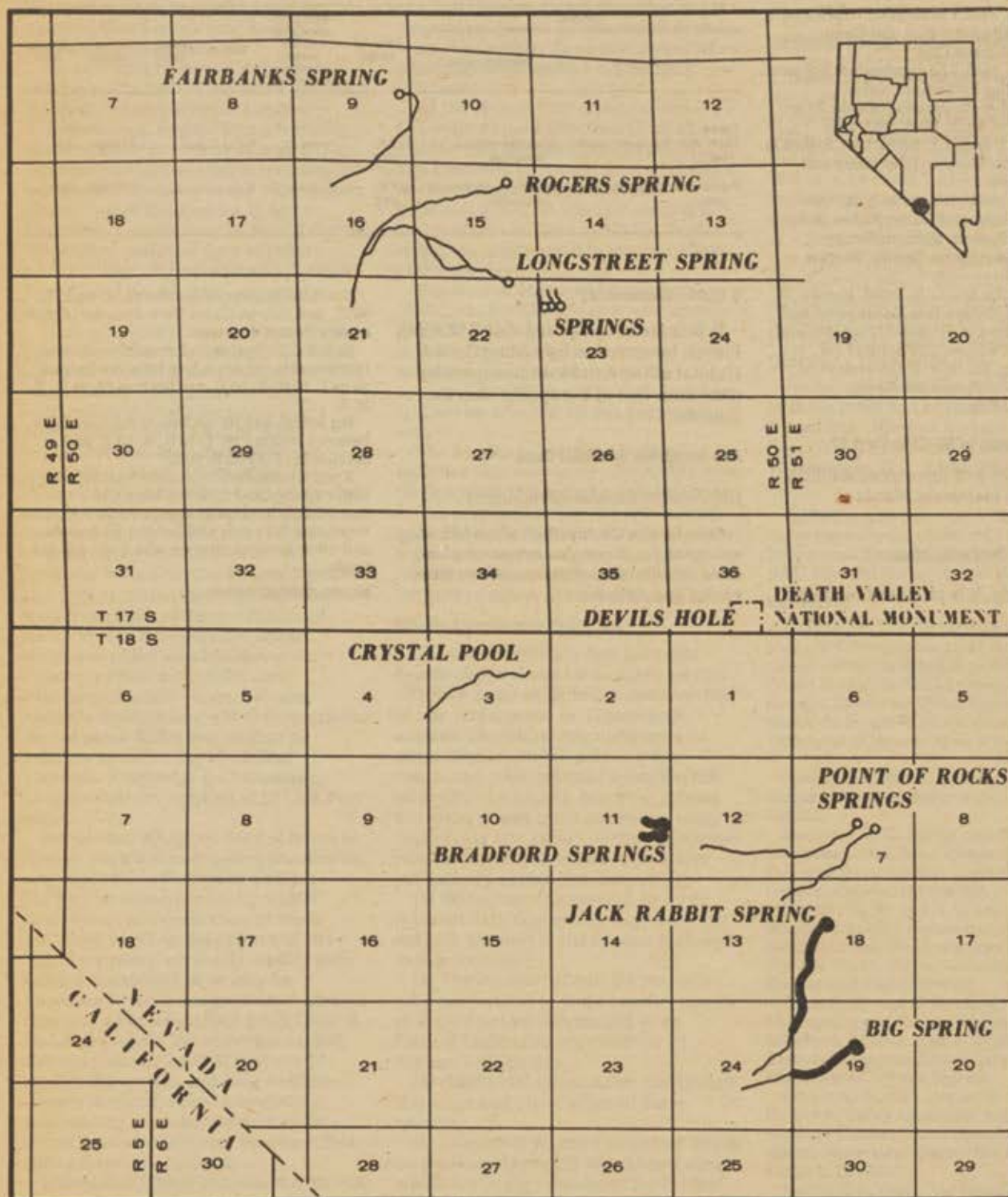
Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Known constituent elements include warm-water springs and their outflows and surrounding land areas that provide vegetation for cover and habitat for insects and other invertebrates on which the species feeds.

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ASH MEADOWS SPECKLED DACE

Nye County, NEVADA



3. It is further proposed that Section 17.95(e), Fishes, be amended by adding Critical Habitat of the Ash Meadows Amargosa pupfish after that of the leopard darter as follows:

Ash Meadows Amargosa Pupfish

(Cyprinodon nevadensis mionectes)

Nevada, Nye County: Each of the following springs and outflows plus surrounding land areas for a distance of 50 meters from these springs and outflows:

Fairbanks Spring and its outflow to the boundary between Sections 9 and 10, T. 17 S., R. 50 E.

Rogers Spring and its outflow to the boundary between Sections 15 and 16, T. 17 S., R. 50 E.

Longstreet Spring and its outflow to the boundary between Sections 15 and 22, T. 17 S., R. 50 E.

Three unnamed springs in the northwest corner of Section 23, T. 17 S., R. 50 E., and each of their outflows for a distance of 75 meters from the spring.

Crystal Pool and its outflow for a distance of 400 meters from the pool.

Bradford Springs in Section 11, T. 18 S., R. 50 E., and their outflows for a distance of 300 meters from the springs.

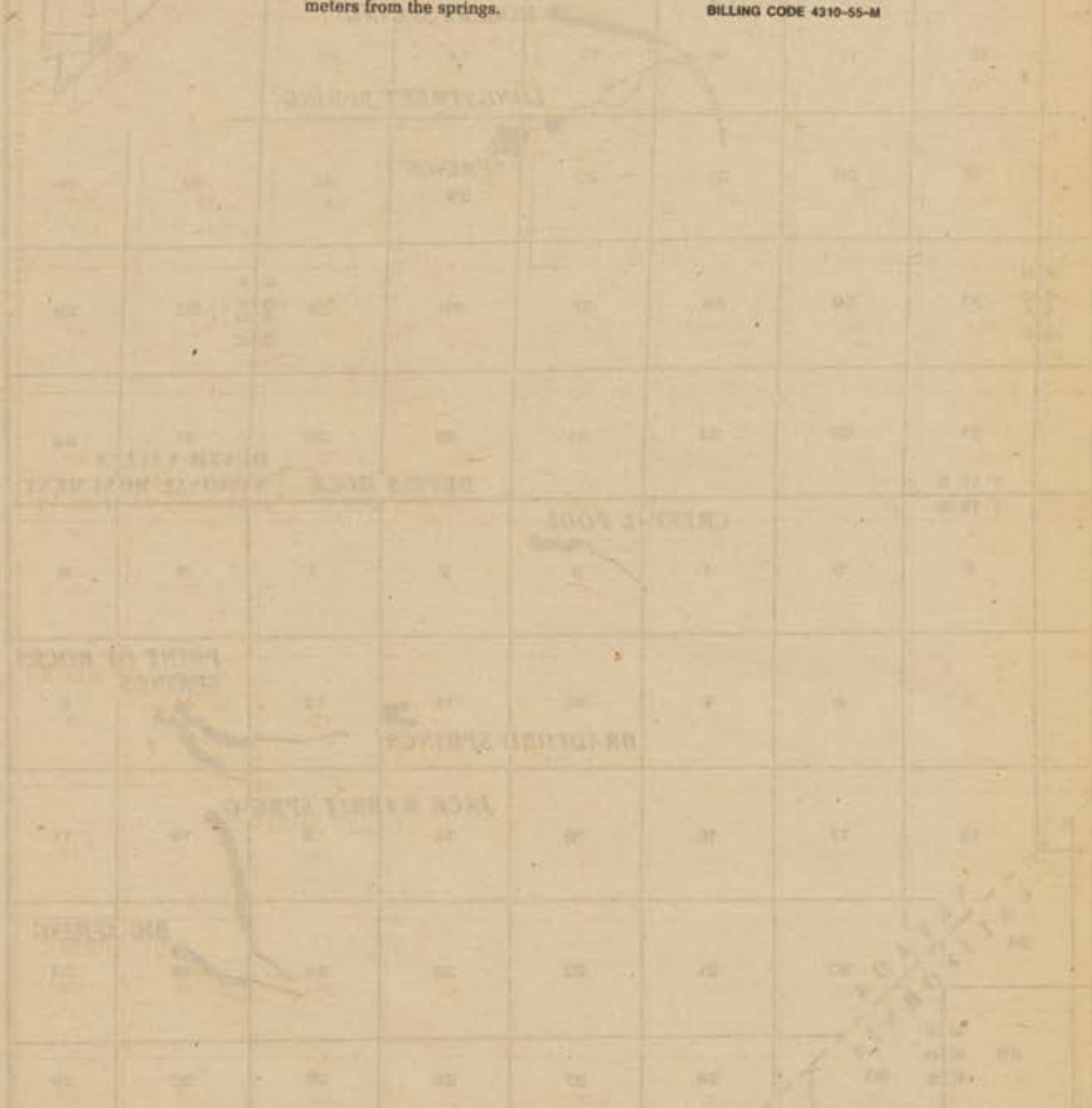
Jack Rabbit Spring and its outflow flowing southwest to the boundary between Section 24, T. 18 S., R. 50 E. and Section 19, T. 18 S., R. 51 E.

Big Spring and its outflow to the boundary between Section 19, T. 18 S., R. 51 E. and Section 24, T. 18 S., R. 50 E.

Point of Rocks Springs and their entire outflows within Section 7, T. 18 S., R. 51 E.

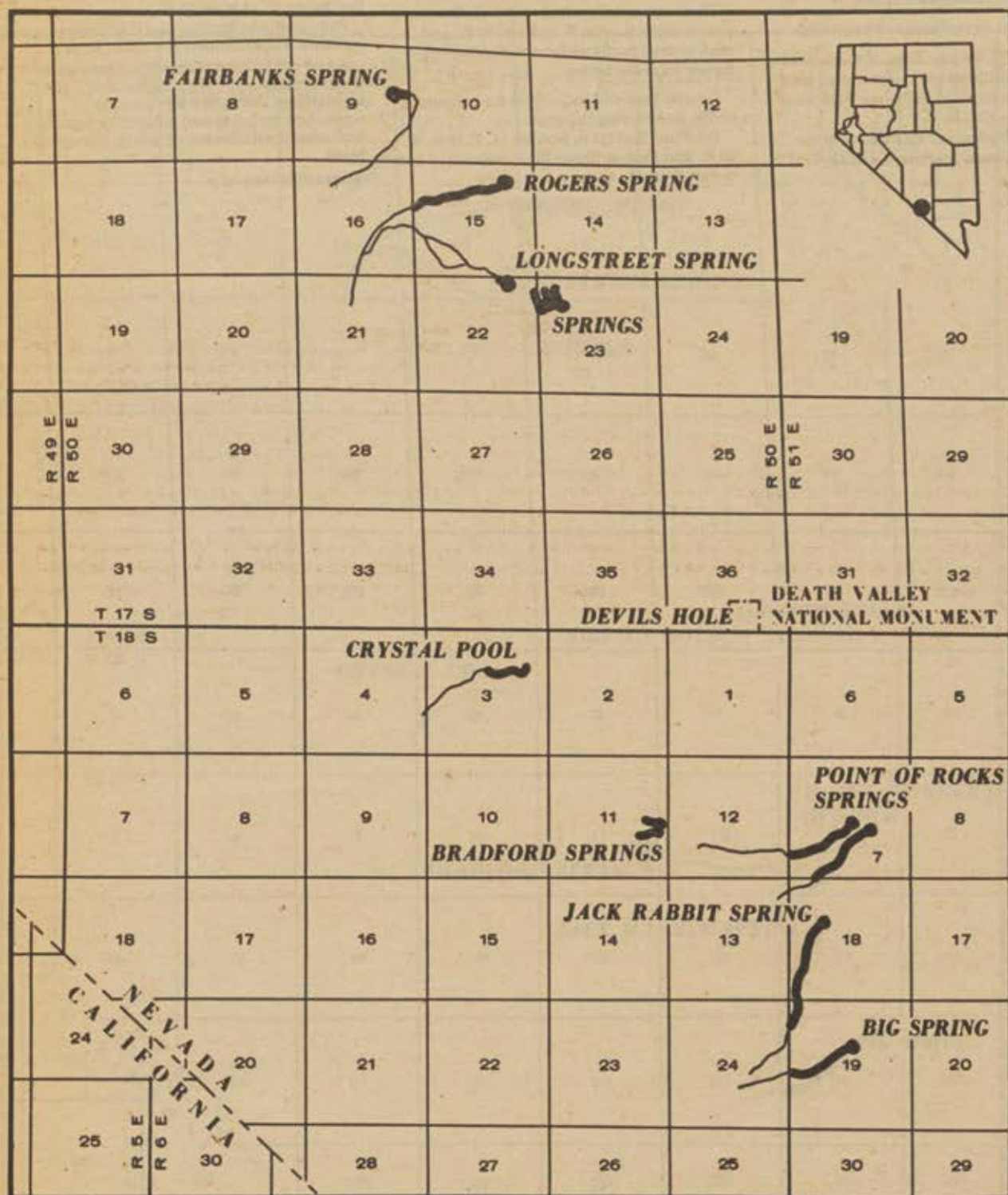
Known constituent elements include warm-water springs and their outflows and surrounding land areas that provide vegetation for cover and habitat for insects and other invertebrates on which this species feeds.

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ASH MEADOWS AMARGOSA PUPFISH

Nye County, NEVADA



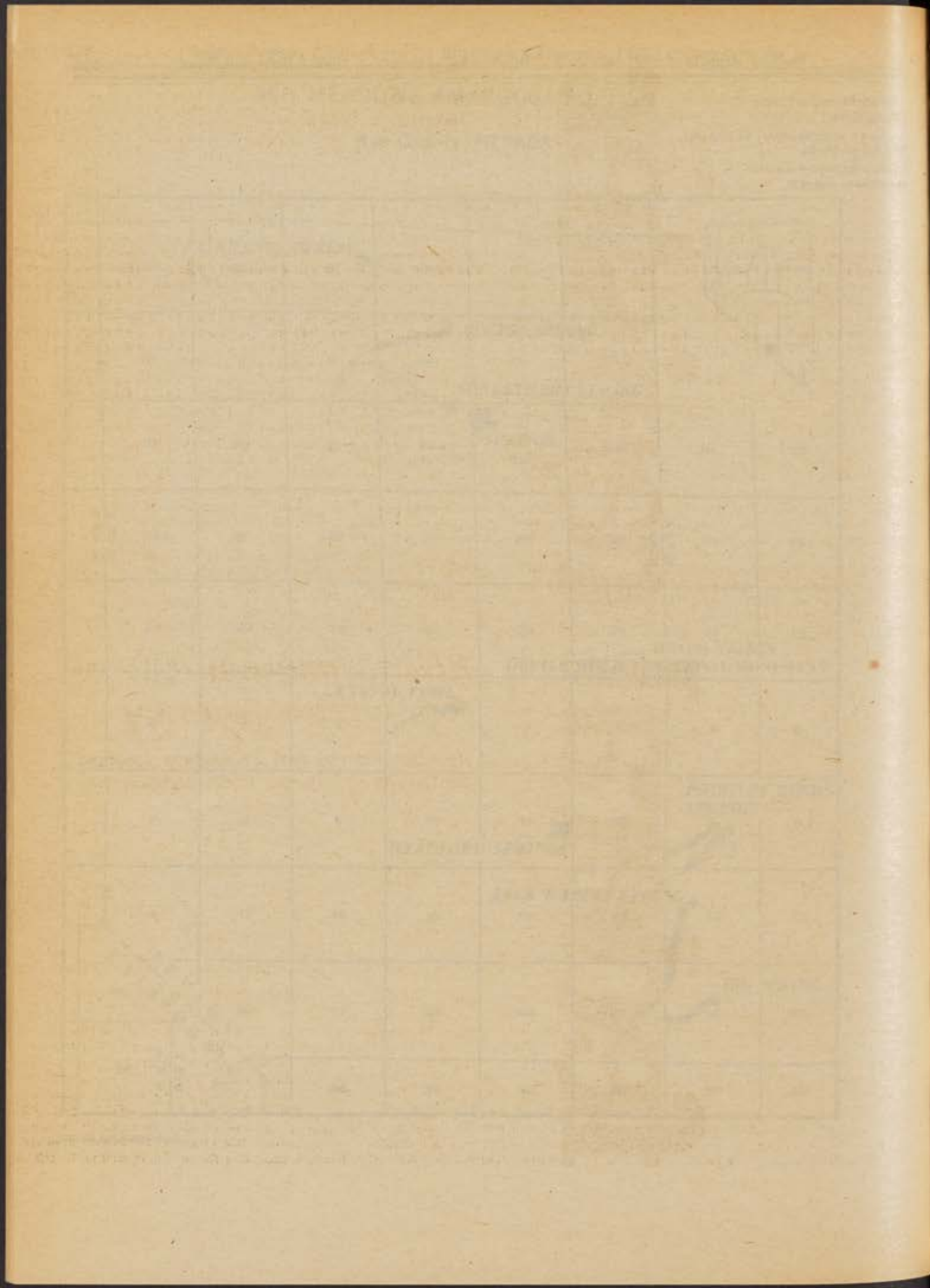
Dated: December 7, 1982.

J. Craig Potter,

*Acting Assistant Secretary for Fish and
Wildlife and Parks.*

[FR Doc. 83-305 Filed 1-4-83; 8:45 am]

BILLING CODE 4310-55-M



federal register

**Wednesday
January 5, 1983**

Part IV

Environmental Protection Agency

**National Primary and Secondary Ambient
Air Quality Standards; Hydrocarbons**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 50

[Docket Number OAQPS A-80-60; AD-FRL-1983-5]

National Primary and Secondary Ambient Air Quality Standards

AGENCY: Environmental Protection Agency.

ACTION: Final rulemaking.

SUMMARY: As a result of the review of the hydrocarbon criteria, EPA revokes the primary (health) and secondary (welfare) national ambient air quality standards (NAAQS) for hydrocarbons. The rule (40 CFR 50.10) has been found to be technically inadequate. The intended effect of this revocation is to eliminate unnecessary regulations pertaining to ambient air quality.

EFFECTIVE DATE: This action is effective January 5, 1983.

ADDRESSES: A docket (Number OAQPS A-80-60) containing information used by EPA in revising the standards is available for public inspection and copying between 8:00 a.m. and 4:30 p.m., Monday through Friday at EPA's Central Docket Section, West Tower Lobby, Gallery I, Waterside Mall, 401 M Street, S.W., Washington, D.C. A reasonable fee may be charged for copying. The final review document on hydrocarbons, *Review of Criteria for Vapor-Phase Hydrocarbons*, EPA-600/8-80-45 (August 1980) is now available from: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. (PB 82-136516; A14 paper, \$24; A01 micro, \$4).

FOR FURTHER INFORMATION CONTACT: Dr. David McKee, Ambient Standards Branch, Strategies and Air Standards Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Telephone: (919) 541-5655 (FTS 629-5655).

SUPPLEMENTARY INFORMATION: On May 8, 1981, EPA proposed to revoke the NAAQS for hydrocarbons (46 FR 25655). The proposal notice set forth the rationale for revoking the standards and detailed background information relating to the proposal.

Prior to proposal, EPA solicited public comments on a draft document, initially entitled *Facts and Issues Relating to the Need for a Hydrocarbon Criteria Document*. The final version of the document, entitled *Review of Criteria for Vapor-Phase Hydrocarbons*, was published in connection with the

proposal to revoke the standards. As discussed in the proposal notice, the hydrocarbons review document was also discussed at a public meeting of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board on March 17, 1980 in Washington, D.C. At that meeting, CASAC members concluded that hydrocarbons, as a class, do not cause adverse health or welfare effects at or near ambient levels.

Summary of Rationale for Revocation of Primary and Secondary Standards

As more fully discussed in the proposal notice, the NAAQS for hydrocarbons are unique among the seven pollutants or classes of pollutants for which NAAQS have been established in the following respects: (1) The NAAQS were not based on direct health or welfare effects of hydrocarbons, either singly or as a class; (2) the NAAQS were intended to serve solely as a guide in helping States determine the extent of hydrocarbon emission reductions necessary for attainment of the original NAAQS for photochemical oxidants; and (3) they were not intended to have the same regulatory status and functions as other NAAQS. For these reasons, no State Implementation Plans for attainment of NAAQS for hydrocarbons have been required and only limited monitoring of ambient non-methane hydrocarbons has been required.

EPA's recent review of hydrocarbon criteria indicated that although hydrocarbons in ambient air are major precursors to ozone and other photochemical oxidants, no consistent quantitative relationship exists nationwide between ambient air ozone concentrations and hydrocarbon air quality levels. Accordingly, the original basis for the NAAQS for hydrocarbons can no longer serve to justify retaining them as a guide for attainment of the ozone standards.

A review of the literature since 1970 has confirmed that hydrocarbons, as a class, do not appear to cause adverse health or welfare effects at the present ambient air levels. Thus, there is presently no direct health or welfare basis for retaining the NAAQS for hydrocarbons. Nonetheless, hydrocarbons should continue to be controlled or restricted because of their contribution to the formation of ozone and the resultant health and welfare effects of this pollutant and other photochemical oxidant products. Specific hydrocarbons which are shown to cause adverse effects can be regulated separately.

Summary of Comments Received

Only fifteen comments have been received on the proposal to revoke the NAAQS for hydrocarbons, all of which supported the proposed action.

Final Action

For the reasons stated above and in the notice of proposed rulemaking published on May 8, 1981, EPA has decided to revoke the NAAQS for hydrocarbons. Because this action relieves a restriction, it will take effect immediately upon publication. As discussed in the proposal notice, this action will not restrict EPA or state authority to regulate emissions of hydrocarbons as a class, particular hydrocarbon compounds, or any other volatile organic compounds that may be found to pose a threat to public health or welfare, and it does not alter current monitoring requirements.

Regulatory Impact

Under Executive Order 12291, EPA must judge whether a regulation is "Major" and, therefore, subject to the requirement of a Regulatory Impact Analysis. This action is *not* major because it involves revocation of a standard or guide, which itself has required only limited regulatory costs. Revocation will result in no increased regulatory costs. Revocation is also expected to have no effect on competition, employment, investment, productivity, innovation, or the competitive ability of United States-based enterprises.

EPA has also determined that this action will not have an economic impact on small entities. Accordingly, the Agency has determined that the preparation of a regulatory flexibility analysis, as defined by the Regulatory Flexibility Act, Pub. L. 96-354, 5 U.S.C. 601-602, is unnecessary.

This notice was submitted to the Office of Management and Budget (OMB) for review under Executive Order 12291.

List of Subjects in 40 CFR Part 50

Air pollution control, Carbon monoxide, Hydrocarbons, Ozone, Sulfur oxides, Particulate matter, Nitrogen dioxide, Lead.

Dated: December 29, 1982.

John W. Hernandez,
Acting Administrator.

PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS

For the reasons set forth in the preamble, EPA amends Title 40, Chapter

I, Part 50, of the Code of Federal Regulations as follows:

1. The authority citation for Part 50 is revised to read as follows:

Authority: Sec. 109, Clean Air Act, as amended 42 U.S.C. 7409.

2. The table of contents for Part 50 is amended by revising the entry for § 50.10 to read as follows:

Sec.

* * * * *

50.10 [Reserved]

* * * * *

3. Section 50.10 is removed and reserved.

§ 50.10 [Removed and Reserved]

[FR Doc. 83-180 Filed 1-4-83; 8:45 am]

BILLING CODE 5560-50-M